

**ABSTRACT**

A media for removal of arsenic from an aqueous system comprising a mixture of: activated bauxite, aluminum trihydrate and a ferric compound selected from the group consisting of ferric hydroxide, ferric oxyhydroxide, ferric hydroxyoxide and mixtures thereof. The mixture is preferably calcined and is thereafter formed into a powder, 5 granules or extruded particles. Preferably, the mixture prior to calcination also contains a natural or synthetic filler which has the capability of modifying the porosity of the mixture. Removal of arsenic from the aqueous system is readily accomplished by contacting the aqueous system with the media until the arsenic is substantially removed from the aqueous system. If arsenic is present in the aqueous system in the +3 valence 10 state, the aqueous system is preferably oxidized to convert the arsenic to the +5 valence state prior to contact of the aqueous system with the media.